Articles on EPA's proposed study at the Covanta incinerator:

NJ.com: EPA chief blasts former Obama official as feds cancel Rahway incinerator study

No thanks. That's the message New Jersey sent to the federal government Monday, after community pushback swelled against a <u>controversial study</u> planned for a Rahway incinerator. Now, President Donald Trump's administration is giving up on the idea.

Bridgewater Courier News: EPA backs out of Rahway study of cancer-linked chemicals

After backlash from environmental activists, the federal Environmental Protection Agency announced it is no longer pursuing plans for a study at the Covanta Union incinerator. EPA Administrator Andrew Wheeler issued a statement Tuesday morning cancelling the study that would have provided the EPA insight on how PFAS chemicals react to municipal waste incinerators.

POLITICO: Torpedoed PFAS study sparks EPA-New Jersey blame game

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The federal Environmental Protection Agency is considering a study into how municipal waste incinerators handle certain chemical compounds linked to cancer. The study, which has not yet been finalized, would occur at the Covanta incinerator, also known as the Union County Resource Recovery Facility. The facility is located on the Rahway River.

PIX11: Millions of oysters dumped in NY waterways could make a big difference

It's the biggest shellfish installation in the history of New York, and it may be the answer to protecting the city from storm surge while keeping our waters clean. Dating back to the 1600s, oysters have a big part of New York City's food economy. But, times have changed, and the oyster economy is no longer booming like it once was. Why? Because of things like pollution and overharvesting.

NJ.com: Proposed Rahway incinerator study could help U.S. deal with toxic chemicals. Activists wonder if it's safe.

It's all around us. A family of thousands of different chemicals known as per- and polyfluoroalkyl substances, or PFAS, have been used in everything from non-stick cookware and stain-resistant fabrics, to the wrappers that carry cheeseburgers and chicken sandwiches from fast-food restaurants.

NJ.com

https://www.nj.com/news/2020/08/epa-chief-blasts-former-obama-official-as-feds-cancel-rahway-incinerator-study.html

EPA chief blasts former Obama official as feds cancel Rahway incinerator study By Michael Sol Warren | NJ Advance Media for NJ.com August 25, 2020

No thanks.

That's the message New Jersey sent to the federal government Monday, after community pushback swelled against a <u>controversial study</u> planned for a Rahway incinerator.

Now, President Donald Trump's administration is giving up on the idea.

On Tuesday, the U.S. Environmental Protection Agency announced that it canceled plans to use the Union County Resource Recovery Facility — a municipal waste incinerator in Rahway — to research how toxic, long-lasting chemicals called per- and polyfluoroalkyl substances (PFAS) break down.

Because PFAS are widespread in consumer goods — from nonstick cookware and cleaning products to stain resistant fabrics and food wrappers — the chemicals are also ubiquitous in society's waste stream.

The proposed study was to be part of EPA's research into how PFAS are affected by various waste disposal methods.

The Rahway study would not have burned PFAS. Instead, the EPA would've introduced two non-toxic substitute compounds with similar chemical structures to PFAS into the incinerator to determine if they are broken down in the burning process. The study also would sample for PFAS in emissions and discharge already being created by burning items containing the substances in the incinerator.

The EPA study had the blessing of the New Jersey Department of Environmental Protection and the partnership of Covanta, the Morristown-based company that leases and operates the Rahway incinerator. But the Union County Utilities Authority, which actually owns the facility, had not approved any testing.

In a statement, EPA Administrator Andrew Wheeler cast Judith Enck — who served as regional administrator for EPA Region 2 under President Barack Obama — as the root of controversy surrounding the planned study.

It was Enck who first learned of the EPA's plan and alerted local groups in New Jersey. Enck previously said she was concerned that the Trump administration would cherry-pick data from the study to justify allowing PFAS to be burned in municipal incinerators around the nation.

Word of the planned study spread quickly among environmental justice activists in the Garden State, many of whom already harbor a deep skepticism of the safety of such incinerators. Safety concerns were amplified by a lack of community engagement as the study was developed, and by

a recent scandal in upstate New York involving a hazardous waste incinerator that had been contracted by the Department of Defense to burn millions of pounds of PFAS-containing foam.

Wheeler described Enck as being ignorant, dishonest and unprofessional in her efforts to raise awareness of the EPA's plan.

"Enck's politicization of ongoing bipartisan research efforts with the State of New Jersey is a disservice to communities throughout the Garden State and the country as a whole," Wheeler said in a statement. "Due to Enck's meritless claims, the study has been cancelled to the detriment of science, a better understanding of PFAS, and the protection of public health and the environment."

Enck brushed off Wheeler's statement, and said the EPA should've done more work to inform the surrounding community that a federal experiment was being planned in their backyard.

"I was happy to stand with the Rahway NAACP and other groups working for environmental justice in New Jersey," Enck said. "It is important for EPA to announce where they intend to try this next, how they plan to engage with local residents, and what they are doing to investigate non-incineration treatment technologies to deal with PFAS waste."

But Wheeler's statement, heavy in criticism of a political appointee from the previous administration, does not address what steps the EPA took to engage the community beyond notifying local elected officials.

DEP still believes that the EPA study would've been an important step in furthering the understanding of how to deal with PFAS, Deputy Commissioner Shawn LaTourette said. He stressed that DEP only asked EPA to move this study to a different state, not cancel it completely.

"If you are deeply invested in a priority, as that [Wheeler] statement suggests the Trump administration is, you don't let a misunderstanding derail you," LaTourette said.

The EPA said that it was Covanta who eventually made the final decision to cancel the study.

"If NJDEP would like to find a way to rescue this project, EPA would gladly work with them to find a new path forward," EPA spokeswoman Sonia Mohabir said in an email Tuesday evening.

At the end of the day, LaTourette added, the state could not move forward against the objections of the local residents.

"As important as the science is to us, our relationship with, our connectivity to and our investment in serving our vulnerable communities is just as strong," LaTourette said.

Covanta had taken the lead on local outreach, according to the EPA, which added that the company had contacted "local officials, representatives of the Rahway City government and residents."

LaTourette said the controversy has been instructive for DEP, and the state plans to try harder to maintain community engagement on sensitive issues moving forward.

"Even when we do not own the issue, whether it is a piece of research or a permit, at the federal or local level, nevertheless, we own and are invested in the relationships with the advocates and the community members," LaTourette said. "We're going to remember that, we're going to remember this experience and we're going to let it inform the work ahead."

Maria Lopez-Nuñez, the deputy director of organizing and advocacy for the Ironbound Community Corporation, said she was impressed that DEP acknowledged the community's concerns and asked the EPA to hold off. She said she's hopeful that this is the start of a trend for how DEP interacts with environmental justice communities, not just an exception.

"We were harsh on DEP," Lopez-Nuñez said of recent days. "But I am happy to take it all back when they prove us wrong, and they show us that they can listen to communities."

It's not just the state that has pledged to focus on community engagement. The Union County Board of Chosen Freeholders said in a statement Tuesday that it expects any discussions of future studies to be subject to public hearings.

"We do not support this study," Freeholder Christopher Hudak said. "Furthermore, the Board will continue to advocate for the health and well-being of residents in the immediate vicinity and beyond. The Board of Chosen Freeholders expects any studies contemplated in the future proceed only after the UCUA holds a public hearing which permits residents, stakeholders, and elected officials to comment."

If the EPA were to conduct the study at a new location, it is unclear where that would be. The EPA said Rahway had been chosen in the first place because that incinerator is representative of similar facilities across the country, and is structured in a way that would make monitoring work during the research easier.

The EPA added that Covanta had volunteered the Rahway site, and now that Covanta has backed out, the federal agency does not have another test site identified.

Bridgewater Courier News

https://www.mycentraljersey.com/story/news/local/land-environment/2020/08/25/epa-backs-out-rahway-nj-study-pfas-cancer-linked-chemicals/5632434002/

EPA backs out of Rahway study of cancer-linked chemicals

By Nick Muscavage

August 25, 2020

RAHWAY – After backlash from environmental activists, the federal Environmental Protection Agency announced it is no longer pursuing plans for a study at the Covanta Union incinerator.

EPA Administrator Andrew Wheeler issued a statement Tuesday morning cancelling the study that would have provided the EPA insight on how PFAS chemicals react to municipal waste incinerators.

Wheeler placed the blame on a former EPA official from the Obama Administration for issuing statements to the public about her concerns of the proposed study.

"Former Obama Administration EPA leader Judith Enck's unprofessionalism, personal ignorance, and dishonesty has single-handedly shut down the Rahway study setting back the agency's research efforts on PFAS — an emerging chemical of concern and top priority of the Trump Administration," Wheeler said. "This is emblematic of the Obama Administration's disregard for community-based environmental issues. Enck's politicization of ongoing bipartisan research efforts with the State of New Jersey is a disservice to communities throughout the Garden State and the country as a whole."

Wheeler said that Enck's "meritless claims" have resulted in the study's cancellation "to the detriment of science, a better understanding PFAS, and the protection of public health and the environment."

The study would have occurred at the Covanta incinerator, also known as the Union County Resource Recovery Facility on the Rahway River.

The study was going to look at how municipal waste incinerators handle PFAS, or perfluorinated alkylated substances. PFAS can be found in nonstick frying pans, firefighting foam, waxes and paints.

According to the EPA, there is evidence that exposure to PFAS can lead to adverse health outcomes in humans, such as reproductive and developmental defects, liver and kidney damage, and immunological effects in laboratory animals.

The most consistent findings from human studies are increased cholesterol levels among exposed populations, as well as cancer, effects on infant birth weights, adverse effects on the immune system and thyroid hormone effects.

In the proposed study, the environmental agency would not have been introducing PFAS to the Covanta incinerator, but rather a controlled amount of similar chemical compounds that the EPA says is non-hazardous in low levels.

The indicator compounds that the EPA was planning to introduce were CF4 and C2F6 at 10 parts per million for five hours each day with real-time monitoring of the combustion.

Although the state Department of Environmental Protection would not have needed to issue permits or approvals of the study because CF4 and C2F6 are classified as non-hazardous, the state agency still supported the premise and goal of the EPA's study, according to state DEP Deputy Commissioner Shawn LaTourette.

"The fact remains that PFAS are in our waste stream and we should know what's happening chemically when it hits the flame in a solid waste incinerator," LaTourette said. "And that's what the study is about."

On Tuesday, LaTourette said state DEP Commissioner Catherine McCabe spoke with the EPA and requested that the EPA consider relocating the study "outside of New Jersey's boundaries."

LaTourette said it was not because the study was not worthwhile, but because of misinformation that was spread from environmental justice groups.

"It is indeed, as I've said before, worthwhile and important science," he said. "Bad information can sow mistrust and it can sow a misunderstanding of the facts that could lead folks to think that they are in danger of being harmed, and that's that last thing that we want."

Environmentalists, however, raised concern that the study could have led to changes in regulations that would allow more PFAS to be burned at municipal waste incinerators.

The environmentalists rejoiced when the EPA announced it withdrew from the proposed study.

"EPA attempted to undertake an experiment at the Covanta incinerator in Rahway, New Jersey on the efficacy of burning PFAS chemicals in a municipal waste incinerator," said Enck, the former EPA Region 2 Administrator. "EPA did not inform the community in advance and failed to explain if this was a precursor to burn PFAS in municipal incinerators throughout the country, which is illegal in New Jersey."

She said it is important for the EPA to announce where they intend to try this next, how they plan to engage with local residents, and what they are doing to investigate non-incineration treatment technologies to deal with PFAS waste.

Jeff Tittel, the director of the New Jersey Sierra Club, said that the EPA's announcement" is a "big win for the people of New Jersey and Rahway."

"Because of public pressure, EPA has decided to cancel their experiment of burning a poly-fluorocarbon, CF4, at the Covanta Incinerator in Rahway. This shows that by standing up to the EPA when they're wrong, we can stop something that is bad for the environment and public health," he said. "EPA was using this experiment as a way to burn PFAS in solid waste incinerators. Burning PFAs releases harmful and even toxic chemicals, and since it's a forever chemical it stays in the environment and people forever."

Career scientists at the EPA advised that the research was safe and would have had no adverse impact or risk on the surrounding communities.

The research that the EPA planned to conduct was done so at the request of many states, expressed through interactions with the Environmental Council of State, Congress, environmental non-governmental organizations, and the public, according to the EPA.

"The Municipal Waste Combustor PFAS Emissions Characterization Study would have benefitted states and communities across the nation by deepening our understanding of PFAS compounds and how well they are destroyed through incineration," the agency said in a statement. "EPA was coordinating with the New Jersey Department of Environmental Protection and local government in Rahway, New Jersey."

Rahway Mayor Raymond Giacobbe said he supports the decision of not proceeding with the study.

"The New Jersey Department of Environmental Protection, along with the Union County Utilities Authority – which owns the Resource Recovery Facility – decided late last week not to proceed with the testing proposed by the United States Environmental Protection Agency," he said in a statement. "We support the decision, and are currently working with Covanta – the operator of the facility – to ensure enhanced community outreach and communication moving forward."

POLITICO

https://subscriber.politicopro.com/energy/article/2020/08/torpedoed-pfas-study-sparks-epa-new-jersey-blame-game-1985323

Torpedoed PFAS study sparks EPA-New Jersey blame game By Alex Guillén, Samantha Maldonado August 25, 2020

A planned government study of whether trash incinerators can destroy "forever" chemicals was abruptly canceled on Tuesday, leaving the Trump administration and New Jersey pointing fingers over the collapse.

PFAS, which take millennia to break down, have drawn bipartisan concern because of widespread contamination of the chemicals used in carpeting, apparel, sealants and firefighting foam. Studies have shown more than 98 percent of Americans have some amount of the cancercausing substances in their blood.

EPA blamed activists for halting the study, while the New Jersey Department of Environmental Protection faulted the Trump administration for failing to address fears that burning the chemicals posed a risk to residents of Rahway, the city to the southwest of Newark where the incinerator is located.

New Jersey officials had originally backed the study at the facility operated by Covanta, but after local opposition arose asked EPA to move the project to another state.

Scientists had hoped the study would shed light on whether PFAS chemicals break down in municipal waste incinerators, which burn many items that can include PFAS, ranging from clothing and nonstick pans to popcorn bags and dental floss.

Activists and environmentalists had opposed the study after Judith Enck, the former Obama EPA regional administrator for New Jersey and New York who now runs the anti-plastics campaign Beyond Plastics, raised concerns about the potential risks.

The local NAACP chapter also questioned why the study was being conducted in an environmental justice community, while New Jersey Sierra Club Director Jeff Tittel wondered about the potential public health impacts to nearby residents.

NJ DEP initially rebuffed the concerns, saying the test presented no environmental or health threats and that the data would prove valuable. New Jersey has taken aggressive action on PFAS and earlier this summer adopted regulations setting some of the most stringent drinking water limits on PFAS.

The Trump administration agreed, saying EPA scientists had determined that the small amount of the chemicals to be used as surrogates for PFAS to be used in the study would not have posed any risk to the community or environment.

But, EPA said, Covanta pulled the plug after meeting with local officials and community representatives.

"Based on feedback during those interactions, Covanta understandably made the decision that the study should be cancelled," EPA spokeswoman Molly Block said.

Covanta spokesman James Regan said the company had wanted to participate in the research but had not received authorization from the Union County Utilities Authority, which owns the facility.

"There is a real need for robust scientific data to better understand the fate of PFAS in everyday products and waste, so we will look closely at any future opportunity to help study this important topic," he said.

Shawn LaTourette, the DEP's deputy commissioner, said Commissioner Catherine McCabe on Monday asked EPA Regional Administrator Pete Lopez to find another site for the study outside New Jersey.

"Not because the study is not worthwhile science," LaTourette said, "But rather given the misperceptions that have been stirred up around the topic," particularly in environmental justice communities where Covanta's incinerators are located.

LaTourette blamed the EPA for failing to address concerns in the local communities and emphasized the importance of the research, in spite of his department's role in killing it.

"For now I am punting it, yes, but I'm punting it to further discussion. I don't accept the EPA statement from headquarters that it's all now done," he said.

LaTourette — who praised the study as a welcome change to the Trump administration's propensity to ignore science — framed its cancellation as proof of the lack of commitment to science at the agency because it had walked away at the first sign of trouble. LaTourette also acknowledged the "apparent contradictions" between New Jersey allowing the supposed misunderstanding to torpedo the study while also upholding it as necessary science.

EPA, meanwhile laid the blame on a single instigator, Enck. In an unusually targeted statement, EPA Administrator Andrew Wheeler blasted her for interfering.

"Former Obama Administration EPA leader Judith Enck's unprofessionalism, personal ignorance, and dishonesty has single-handedly shut down the Rahway study setting back the agency's research efforts on PFAS," Wheeler said. "Due to Enck's meritless claims, the study has been canceled to the detriment of science, a better understanding [of] PFAS, and the protection of public health and the environment."

Enck, who said she was concerned the study could lead to greenlighting the intentional burning of PFAS around the country, responded that EPA should have informed the local community of its plans.

"It is important for EPA to announce where they intend to try this next, how they plan to engage with local residents, and what they are doing to investigate non-incineration treatment technologies to deal with PFAS waste," she said.

The canceled study would have introduced small amounts of two compounds, CF4 and C2F6 — which are chemically similar to PFAS but not hazardous in small amounts, according to EPA — into the Rahway incinerator. The facility burns about 1,500 tons of waste daily and can generate up to 42 megawatts of electricity, enough to power about 30,000 homes.

Officials could then study the emissions in real-world conditions to determine whether the compounds were destroyed in the burning, captured by air pollution control equipment or released into the air.

Bridgewater Courier News

https://www.mycentraljersey.com/story/news/local/land-environment/2020/08/25/epa-considers-rahway-nj-site-study-cancer-linked-chemicals/3407865001/

EPA considers Union County site for study on cancer-linked chemicals By Nick Muscavage August 25, 2020

RAHWAY – The federal Environmental Protection Agency is considering a study into how municipal waste incinerators handle certain chemical compounds linked to cancer.

The study, which has not yet been finalized, would occur at the Covanta incinerator, also known as the Union County Resource Recovery Facility. The facility is located on the Rahway River.

The study would look at how municipal waste incinerators handle PFAS, or perfluorinated alkylated substances. PFAS can be found in nonstick frying pans, firefighting foam, waxes and paints.

According to the EPA, there is evidence that exposure to PFAS can lead to adverse health outcomes in humans, such as reproductive and developmental defects, liver and kidney damage, and immunological effects in laboratory animals.

The most consistent findings from human studies are increased cholesterol levels among exposed populations, as well as cancer, effects on infant birth weights, adverse effects on the immune system and thyroid hormone effects.

PFAS are so common that the chemical compound is inevitably found in everyday garbage that is already being processed by municipal waste facilities such as Covanta, which processes about 1,500 tons of solid waste each day in Union County.

It is unknown how PFAS react to the high temperatures of municipal waste incinerators, according to the EPA.

In the proposed study, the environmental agency would not be introducing PFAS to the Covanta incinerator, but rather a controlled amount of similar chemical compounds that the EPA says is non-hazardous in low levels.

The indicator compounds are CF4 and C2F6.

"The research that EPA plans to conduct is being done by the agency at the request of many states, expressed through interactions with the Environmental Council of States (ECOS)," Walter Mugdan, deputy regional administrator for EPA Region 2, said in a statement. "This research benefits states and communities by deepening our understanding of PFAS compounds and how well they are destroyed through incineration."

Mugdan said the study's purpose is to learn if any PFAS are emitted during the combustion of municipal waste, which already may contain trace amounts of PFAS found in everyday consumer products.

"EPA would not be introducing any PFAS compounds to the Covanta incinerator," he said. "The research plans are still being developed and no date for testing has been finalized."

He said the EPA is coordinating with the state Department of Environmental Protection and local government officials.

The Covanta incinerator would operate as it normally does during the study, he said.

"The research will be conducted over a three-day period and will involve the introduction of a very small amount of two non-hazardous indicators for a few hours each day and the collection of samples for laboratory analysis," Mugdan said. "The indicator compounds will serve as experimental controls."

The compounds would be added at 10 parts per million for five hours each day with real-time monitoring of the combustion.

Although the state DEP does not need to issue permits or approvals of the proposed study because CF4 and C2F6 are classified as non-hazardous, the state agency still supports the premise and goal of the EPA's study, according to state DEP Deputy Commissioner Shawn LaTourette.

"The study is not going to happen anytime in the near time, but it would not contribute PFAS into a solid waste incinerator," LaTourette said. "We don't do that in New Jersey."

"The fact remains that PFAS are in our waste stream and we should know what's happening chemically when it hits the flame in a solid waste incinerator," he added. "And that's what the study is about."

Some environmentalists are concerned that the study could lead to changes in regulations that would allow more PFAS to be burned at municipal waste incinerators.

"Doing an experimental test burn to look for PFAS chemicals at the Covanta incinerator in Rahway is a bad idea," said former EPA Regional Administrator Judith Enck, who oversaw the EPA in New Jersey and New York under President Barack Obama. "The community was not informed and there is concern that the Trump administration will use this information to promote incineration of PFAS chemicals at municipal waste incinerators."

She said that a "much better experiment would be to shut down the incinerator in Rahway and measure the environmental and public health impacts, before and after."

Jeff Tittel, director of the New Jersey Sierra Club, said that Rahway has already been historically "overburdened" with pollution.

"EPA is wrong," he said. "They should not be experimenting with the people of Rahway. What they are doing is very troubling and may be in violation of the Clean Air Act. They will be releasing pollution and impacting the people and environment of Rahway. What's worse is that they are doing this experiment of burning CF4 so that they can come up with a way to burn PFAS, which is illegal to burn."

He said burning PFAS releases "harmful and even toxic chemicals" into the environment that "will stay in the environment and people forever."

"DEP needs to stop the burn," he added.

Sebastian D'Elia, communications director for Union County, confirmed the study is only in "exploratory stages" and not yet approved.

The 22-acre Union County Resource Recovery Center was designed and built by Covanta but is owned by the Union County Utilities Authority, which is an autonomous agency. Covanta operates the facility under a long-term lease agreement.

"It's just being discussed," D'Elia said. "Nothing is definite on that yet."

Rahway Mayor Raymond Giacobbe, in a statement, said, "The New Jersey Department of Environmental Protection, along with the Union County Utilities Authority – which owns the Resource Recovery Facility – decided late last week not to proceed with the testing proposed by

the United States Environmental Protection Agency. We support the decision, and are currently working with Covanta – the operator of the facility – to ensure enhanced community outreach and communication moving forward."

PIX11

https://www.pix11.com/weather/weather-science/millions-of-oysters-dumped-in-ny-waterways-could-make-a-big-difference

Millions of oysters dumped in NY waterways could make a big difference By Stacy-Ann Gooden August 22, 2020

It's the biggest shellfish installation in the history of New York, and it may be the answer to protecting the city from storm surge while keeping our waters clean.

Dating back to the 1600s, oysters have a big part of New York City's food economy. But, times have changed, and the oyster economy is no longer booming like it once was. Why? Because of things like pollution and overharvesting.

With climate change a major concern, tropical cyclones are expected to be bigger and more powerful as we saw with Superstorm Sandy. Bringing back these ecosystem engineers could be the answer to protecting our planet.

That's why the Billion Oyster project, the New York State Department of Environmental Conservation, and students from the NY Harbor School on Governors Island are working together to restore Oyster reefs. The now-six year project has already led to progress.

The plan is to release 15 million oysters, settled on recycled shells from NYC restaurants, into a 5 acre installation in the New York Harbor.

It's an epic feat with a big upside, because oysters are great filtration devices. In fact, every single oyster can filter 30 gallons of water a day.

But don't get it twisted. These particular oysters are not meant for human consumption. They're meant to clean the harbor, which is one of the largest natural harbors in the world. It's located at the mouth of the Hudson River, where it empties into New York Bay and the Atlantic Ocean.

The shellfish are cured for about a year and later become the foundation of the reef. The teams rely on precise GPS locations of where wind speeds are favorable when placing them in the water.

Once crates of recycled oysters are submerged into the waters, they'll remain there for about the next few months and then testing will be done to check their progress. Then the process repeats.

While there's no doubt that rebuilding this natural habitat will take time, the project's success so far does provide hope for the future.

NJ.com

https://www.nj.com/news/2020/08/proposed-rahway-incinerator-study-could-help-us-deal-with-toxic-chemicals-activists-wonder-if-its-safe.html

Proposed Rahway incinerator study could help U.S. deal with toxic chemicals. Activists wonder if it's safe.

By Michael Sol Warren | NJ Advance Media for NJ.com August 22, 2020

It's all around us.

A family of thousands of different chemicals known as per- and polyfluoroalkyl substances, or PFAS, have been used in everything from non-stick cookware and stain-resistant fabrics, to the wrappers that carry cheeseburgers and chicken sandwiches from fast-food restaurants.

"They withstand heat, they withstand grease," Shawn LaTourette, a deputy commissioner of the New Jersey Department of Environmental Protection, said of PFAS. "That was what made them so beneficial. Better living through chemistry, or so they say."

The health effects of PFAS are still being studied, but there is already evidence that the chemicals are linked to increased cancer risk and decreased infant birth rate, according to the U.S. Centers for Disease Control and Prevention.

The ubiquity of PFAS means the everyday waste produced by society is laced with these chemicals. That leaves scientists grappling with a major question: How should we handle the PFAS in our trash?

As part of the quest for answers, the federal government is preparing to run an experiment at a New Jersey incinerator.

The U.S. Environmental Protection Agency plans to burn two non-toxic gases in Rahway as part of an upcoming study, according to an EPA spokesperson. The study has the blessing of the DEP and would be conducted at the Union County Resource Recovery Facility, a municipal waste incinerator operated by the Morristown-based Covanta.

The goal is to determine if such incinerators can break down PFAS.

"This research benefits states and communities by deepening our understanding of PFAS compounds and how well they are destroyed through incineration," the EPA said in a statement.

But environmental justice advocates, who are skeptical of the experiment's safety and federal government's intentions, have questions of their own. Why is the EPA conducting this study in Rahway, a city with large communities of color and a higher proportion of people in poverty than New Jersey as whole? And why has the DEP allowed this study to be developed without community input?

Now, after activist pushback and with a major procedural obstacle in the way, the EPA isn't sure when the study will actually be conducted.

How the study would work

No PFAS will be burned during the Rahway experiment, LaTourette said.

Instead, the EPA plans to inject two non-toxic compounds — carbon tetraflouride (CF4) and hexafluoroethane (C2F6), according to the DEP — into the incinerator. Scientists hope that studying how the two compounds break down in the incinerator will give a glimpse into how PFAS acts in the same situation, because their chemical structures are similar to PFAS.

LaTourette said the substitute chemicals are already commonly found in incinerators, and DEP scientists are confident the experiment will be safe for the surrounding community.

"It's not as though this is something new that isn't there before," LaTourette said. "It's certainly not harmful, and definitely not nefarious."

The EPA said the experiment will be conducted over a three-day period, and the two substitute compounds will be burned for "a few hours" each day. During the study, Covanta would operate the incinerator as normal.

As part of the study, EPA researchers will also analyze samples collected from the incinerator to see if PFAS are being emitted through the burning of everyday trash.

If the study shows that municipal incinerators are not effective at destroying PFAS, LaTourette said there would be new urgency to find new solutions to the trash problem. "If that is happening, we must know it and we must design the technology and the regulatory structure and the processes to stop it," he said

The biggest obstacle to the study moving forward is the Union County Utilities Authority, which owns the Rahway incinerator and leases it to Covanta for operation.

The UCUA has not authorized any testing to be done at the facility in August or at any date in the future, the utility's executive director Dan Sullivan told NJ Advance Media on Friday.

Covanta confirmed that the UCUA approval is still missing.

"The U.S. EPA approached us to be part of a study and we tried to cooperate with their research team, but the UCUA, the owner of the facility, has not authorized it," Covanta spokeswoman Nicolle Robles told NJ Advance Media.

"There is a real need for robust scientific data to better understand the fate of PFAS in everyday products and waste," Robles added. "We would look closely at any future opportunity to help study this important topic."

Local concern

The mere proposal of the study has drawn concern from local activists.

Quanae Palmer-Chambliss, the president of the NAACP's Rahway chapter, just has to walk down her street to get a view of the incinerator that looms over the city's fourth ward. She has childhood memories of the incinerator too; she remembers her mother rallying the community against the facility's construction as president of the same chapter.

"I remember when the incinerator was coming to Rahway," Palmer-Chambliss said. "And I remember how hard the ladies of the NAACP fought to not have the incinerator built."

Today, Palmer-Chambliss keeps a suspicious eye on the incinerator, which burns 1,500 tons of waste daily to generate enough electricity to power roughly 30,000 homes and businesses. She wonders how, if at all, emissions from the facility may affect local children.

But Palmer-Chambliss said that before a conference call with the DEP on Friday, she had no idea that the EPA studied was being planned.

"Why did you choose an environmental justice community to do this study?" Palmer-Chambliss asked rhetorically to NJ Advance Media after the DEP call. "And if it is so harmless, why wasn't the community made aware?"

LaTourette said the conference call was an effort to quell misinformation and rumors that began circulating Thursday. Some participants described the call as tense, with the activists and community groups deeply skeptical of the information being presented by DEP.

"I think this is an illustration of what happens when you don't inform the community," said Judith Enck, who served as regional administrator for EPA Region 2 under President Barack Obama. "I think they never expected anyone to find out about this, and that's part of why they're playing catchup."

It was Enck who first heard of the EPA study and alerted the New Jersey groups. Enck said she is not concerned about health impacts from CF4 and C2F6 being burned during the study. But she is worried about what the Trump administration could do with data from this study.

"I'm concerned that the New Jersey DEP may not be intending this, but the Trump EPA might cherrypick data to justify sending PFAS to municipal incinerators," Enck said.

Maria Lopez-Nuñez, the deputy director of organizing and advocacy for the Ironbound Community Corporation, said she was disgusted that development of the EPA study was done without meaningful community engagement.

She said it doesn't matter if the compounds being burned (CF4 and C2F6) are non-toxic; community members still deserve to know what could happen in their backyards.

"They thought that no one knew about it, which is just so offensive," Lopez-Nuñez said of the researchers. "As if science has never used people of color as guinea pigs, with things that they were sure was never going to cause damage. There's a really sensitive history here that DEP was disrespecting."

Strained relationships

Covanta's relationship with its host communities in New Jersey have been strained recently. In Newark, purple plumes occasionally spewing from the incinerator in the Ironbound neighborhood have caused public concern. In Camden, plans to build a microgrid has opponents arguing it could extend the life of a Covanta incinerator in that city, according to a TapInto report.

The Rahway incinerator, which was first approved in 1985 and began commercial operation in 1994, has largely stayed out of the headlines. But in 2016, Covanta was fined \$27,000 for violating the terms of its operating permit at the facility by accepting medical waste, according to DEP records.

LaTourette said DEP views the study as a valuable scientific endeavor, and he praised Covanta for being "a good research partner" on the project. But he said he knows the community groups and the people they advocate for are inherently suspicious of anything to do with incinerators. And, he noted that the activists on Friday's call had "a healthy and very legitimate skepticism of government," likely rooted in decades of systemic racism.

"We want to help the community through research and through and science. But just our saying this is not harmful, just our saying trust us, is not enough," LaTourette said. "We have to build our trust with them."

The concerns raised during the conference call spurred DEP Commissioner Catherine McCabe to reach out to the EPA and secure "the postponement of any testing in the immediate term," LaTourette said. He added that DEP is committed working with EPA to ensure a more thorough community engagement process in the lead-up to the study.

As of now, between that postponement and the fact that the UCUA has not authorized any testing at the Rahway incinerator, there is no timeline for the EPA study.

The possibility of the study came as state lawmakers in Trenton are pushing legislation aimed at protecting overburdened communities like Rahway from future pollution. The measure has vehement support from Gov. Phil Murphy's administration.

That makes the idea of the Rahway experiment particularly ironic to Jeff Tittel, the director of the New Jersey Sierra Club.

"It's like, really? The governor cares about environmental justice and cumulative impact, and now we're going to be experimenting on an environmental justice community and the people of New Jersey in general?" Tittel said.

Lopez-Nuñez, the Ironbound community leader, said DEP's handling of the EPA study has undermined trust in the state agency, which doesn't bode well for a coming rule-making process if the environmental justice bill becomes law.

"If DEP is serious about working with environmental justice communities, they're off to a bad start," Lopez-Nuñez said.